



PES Environmental, Inc.
Engineering & Environmental Services

A Report Prepared For:

Pacific Electric Motor Company
1009 66th Avenue
Oakland, California 94601

Attention: Mr. Rand Perry

**FOURTH QUARTER 2000
GROUNDWATER MONITORING REPORT
PACIFIC ELECTRIC MOTOR COMPANY
1009 66TH AVENUE
OAKLAND, CALIFORNIA**

JANUARY 31, 2001

#565

By:

Brent Boehlert
Staff Engineer

William W. Mast, R.G.
Associate Engineer

618.001.02.002

TABLE OF CONTENTS

LIST OF TABLES iii

LIST OF ILLUSTRATIONS iii

1.0 INTRODUCTION 1

2.0 BACKGROUND INFORMATION 1

3.0 WATER-LEVEL MEASUREMENTS..... 2

4.0 GROUNDWATER SAMPLING 2

5.0 DISCUSSION OF MONITORING RESULTS..... 3

 5.1 Water-Level Measurements 3

 5.2 Groundwater Chemistry 4

6.0 REFERENCES..... 4

TABLES

ILLUSTRATIONS

APPENDICES A - GROUNDWATER SAMPLING REPORT

 B - LABORATORY REPORTS AND CHAIN-OF-CUSTODY RECORDS

DISTRIBUTION

LIST OF TABLES

Table 1	Monitoring Well Completion Details
Table 2	Water-Level Elevation Data
Table 3	Analytical Results for Groundwater Samples

LIST OF ILLUSTRATIONS

Plate 1	Site Location Map
Plate 2	Site Plan and Monitoring Well Location Map
Plate 3	Water-Level Elevation Map

1.0 INTRODUCTION

This report presents the results of quarterly groundwater monitoring performed by PES Environmental, Inc. (PES) during the fourth quarter of 2000 at Pacific Electric Motor Company (PEM) in Oakland, California (Plate 1). The current groundwater monitoring program consists of measuring the depth to groundwater in four onsite monitoring wells, and purging and sampling the monitoring wells (Wells MW-1, MW-2, MW-3, and MW-4) on a quarterly basis.

The purpose of the groundwater monitoring program is to: (1) evaluate the presence of petroleum hydrocarbons in groundwater; and (2) monitor water-level variations at the site. The quarterly monitoring program was performed in accordance with the sampling program specified in the Alameda County Environmental Health Services (ACEHS) December 1, 1998 letter *Additional Soil and Groundwater Investigation Report, 1009-66th Ave., Oakland, CA 94601* (ACEHS, 1998b) and the procedures outlined in PES' proposal dated December 11, 1998 (PES, 1998b).

2.0 BACKGROUND INFORMATION

The site is located in a residential and light industrial area in Oakland, California and is presently used to repair large electric motors. PEM formerly operated a 2,000-gallon steel gasoline underground storage tank (UST) on the east side of the warehouse building (Plate 2). The tank was reportedly installed in approximately 1975 (ENVIRON, 1997). In February 1995, the UST was removed by W. A. Craig, Inc. (WAC). Observations at the time of removal indicated that the tank was in good condition and no holes were evident. However, free-phase gasoline product was observed on the water surface in the tank excavation. Soil samples collected from the UST excavation and associated piping trenches detected total petroleum hydrocarbons as gasoline (TPH-g) at concentrations up to 10,000 milligrams per kilogram.

In April 1995, WAC performed a soil investigation consisting of nine soil borings to delineate the lateral and vertical extent of the petroleum hydrocarbons in soil. On the basis of the results of the soil investigation, WAC prepared and implemented a remediation program to remove soil affected by petroleum hydrocarbons. Approximately 1,500 cubic yards of soil were excavated and stockpiled onsite, and 116,000 gallons of petroleum hydrocarbon-affected water were pumped from the excavation and disposed. A dewatering sump installed by WAC during soil excavation was later converted to groundwater monitoring well WAC-1 (Plate 2). Because of its uncertain construction, ACEHS stated that no monitoring of Well WAC-1 is required (ACEHS, 1997). WAC summarized the results of their remediation program in a report entitled *Excavation and Sampling Report, Pacific Electric Motor Co., 1009 66th Avenue, Oakland, California*, dated May 12, 1997 (WAC, 1997).

ENVIRON, Inc. (ENVIRON) installed and sampled three shallow monitoring wells (MW-1, MW-2, MW-3) in June 1997 to evaluate groundwater conditions in the vicinity of the former

UST. Well completion details are summarized in Table 1. The well installation program and associated soil and groundwater sampling program was summarized in the ENVIRON report *Soil and Ground Water Investigation, Summary Report, Pacific Electric Motor Co., 1009-66th Avenue, Oakland, California*, dated July 17, 1997 (ENVIRON, 1997). ENVIRON concluded that the remediation performed had successfully removed the source of the petroleum hydrocarbons (i.e., the former UST), and that residual concentrations of petroleum hydrocarbons in soil and groundwater were present only in the immediate vicinity of the former UST.

In September 1998 PES conducted additional soil and groundwater sampling in the vicinity of the former UST, as requested by the ACEHS in a May 13, 1998 letter to PEM (ACEHS, 1998a). Two soil borings were drilled within the backfill of the former UST excavation, and one monitoring well was installed downgradient of the former UST. Petroleum hydrocarbons were generally not detected in the excavation backfill, although groundwater samples collected from both soil borings indicated the presence of methyl tert-butyl ether (MTBE), a gasoline additive. Elevated petroleum hydrocarbons were found in soil and groundwater downgradient of the UST excavation during installation and groundwater sampling of monitoring well MW-4. On the basis of the elevated concentrations of petroleum hydrocarbons, PES recommended four quarters of additional groundwater monitoring. The additional investigation was summarized in the PES report *Results of Additional Soil and Groundwater Investigation, 1009 66th Avenue, Oakland, California*, dated November 11, 1998 (PES, 1998a).

3.0 WATER-LEVEL MEASUREMENTS

Water levels in four onsite groundwater monitoring wells (Wells MW-1, MW-2, MW-3, and MW-4) were measured by Blaine Tech Services, Inc. (Blaine Tech) of San Jose, California, under the direct supervision of PES, prior to sampling on October 30, 2000. Water level elevation measurements were also collected on November 14, 2000 to evaluate a suspected anomalous water level observed in well MW-4. Depth-to-water in the monitoring wells was measured from the top-of-casing (TOC) reference benchmark to a precision of 0.01-feet using an electronic water-level indicator/interface probe. Depth-to-water measurements were converted to water-level elevations by subtracting the depth to water from the TOC elevation referenced to a site datum established by ENVIRON (ENVIRON, 1997). Free product was not observed in any of the monitoring wells.

To prevent cross-contamination between wells, the portion of the water-level indicator that was submerged in the well was cleaned between well measurements using a phosphate-free detergent/deionized water solution and double rinsed with deionized water.

4.0 GROUNDWATER SAMPLING

On October 30, 2000, Blaine Tech, under the direct supervision of PES, collected groundwater samples from Wells MW-1, MW-2, MW-3, and MW-4. Groundwater samples were collected

from each well after removing approximately three well volumes of water with disposable bailers. During well purging, the discharged water was monitored for pH, temperature, electrical conductivity, and turbidity.

Following purging, samples were collected from the wells using a stainless steel or Teflon disposable bailer and transferred to the appropriate laboratory sample containers. The sample containers were filled slowly to minimize sample volatilization and to ensure that the sample was free of air bubbles. The samples were labeled to designate sample number, time and date collected, and analysis required. The samples were immediately placed in a chilled, thermally-insulated cooler. To prevent cross-contamination between wells, the pump and stainless steel bailer were decontaminated using a high-pressure steam cleaner prior to initial use and after sampling at each well. Sampling procedures are documented in the groundwater sampling report prepared by Blaine Tech and PES, included in Appendix A.

Groundwater samples were transported under chain-of-custody protocol to a state-certified laboratory. Chromalab, Inc. of Pleasanton, California analyzed samples for: (1) total petroleum hydrocarbons quantified as gasoline (TPH-g) using EPA Test Method 8015 Modified; (2) benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Test Method 8020; and (3) methyl tert-butyl ether (MTBE) using EPA Test Method 8020 and reconfirmed using EPA Test Method 8260. The laboratory reports and chain-of-custody records are included in Appendix B.

5.0 DISCUSSION OF MONITORING RESULTS

This section presents a summary of water-level measurements and groundwater analyses results from the October 2000 sampling event.

5.1 Water-Level Measurements

Depth-to-water measurements during the October 2000 event ranged from 5.31 feet (MW-2) to 5.89 feet (MW-4) below TOC. Due to a suspected anomalous elevation at well MW-4, depth-to-water measurements were reconfirmed by PES on November 14, 2000. These measurements ranged from 5.14 feet (MW-2) to 5.61 feet (MW-4). Groundwater-level elevations recalculated from the November 14 water levels ranged from 94.68 feet (MW-3) to 95.14 feet (MW-1) referenced to site datum established by ENVIRON (ENVIRON, 1997). Historical and current depth-to-water measurements and calculated water-level elevations are presented in Table 2.

Plate 3 presents water-level elevation contours developed from water levels measured on November 14, 2000. Groundwater elevations have historically indicated a southerly groundwater flow direction. Groundwater elevations on November 14, 2000 indicate a southwesterly flow direction. The groundwater gradient is approximately 0.005 foot per foot (ft/ft) between MW-4 and MW-1, and 0.0003 ft/ft between MW-3 and MW-4.

5.2 Groundwater Chemistry

A summary of current and historical laboratory chemical results for petroleum hydrocarbons is presented in Table 3. The analytical laboratory reports and chain-of-custody forms are presented in Appendix B.

During the current monitoring period petroleum hydrocarbon compounds were detected in groundwater samples from Well MW-1 and MW-4.

No petroleum hydrocarbon compounds were detected in the samples collected from Wells MW-2, and MW-3 during the current sampling event. Low concentrations had been last detected in these wells during the April 1999 sampling event.

At Well MW-1, TPH-g, benzene, toluene, ethyl benzene, and xylenes were detected at concentrations of 6,000, 130, 14, 330, and 950 micrograms per liter ($\mu\text{g/L}$), respectively. MTBE was not detected using EPA Test Method 8020. Although petroleum hydrocarbon concentrations in Well MW-1 have fluctuated over the past year, concentrations have generally decreased since June 1997.

At Well MW-4, TPH-g, benzene, toluene, ethyl benzene, and xylenes were detected at concentrations of 59,000, 6,700, 2,200, 750, and 3,100 $\mu\text{g/L}$, respectively. MTBE was detected at a concentration of 68,000 $\mu\text{g/L}$ using EPA Test Method 8020. The presence of MBTE was reconfirmed using EPA Test Method 8260, however, the concentration of MTBE was not requantified.

Current data from the downgradient monitoring wells (MW-2 and MW-3), consistent with that of the previous five sampling events, appear to indicate that the petroleum hydrocarbon plume associated with the former UST remains stable and localized. Current data from Well MW-1 are essentially similar to petroleum hydrocarbon concentrations detected in the July 2000 sampling event. Petroleum hydrocarbon concentrations detected in Well MW-4 indicate a substantial decrease since the July 2000 sampling event.

6.0 REFERENCES

Alameda County Environmental Health Services (ACEHS), 1997. *Soil and Groundwater Investigation for Pacific Electric Motor Co., 1009-66th Ave., Oakland, CA 94601*. August 19.

_____, 1998a. *Evaluation of Residual Health Risks at Pacific Electric Motor Company, 1009 66th Avenue, Oakland, CA 94601*. May 13.

_____, 1998b. *Additional Soil and Groundwater Investigation Report, 1009 66th Ave., Oakland, 94601*. December 1.

ENVIRON Corporation, 1997. *Soil and Groundwater Investigation, Summary Report, Pacific Electric Motor Co., 1009-66th Avenue, Oakland, California.* July 17.

PES Environmental, Inc. (PES), 1998a. *Results of Additional Soil and Groundwater Investigation, 1009 66th Avenue, Oakland, California.* November 11.

_____, 1998b. *Proposal, Quarterly Groundwater Sampling, Pacific Electric Motor Company, Oakland, California.* December 11.

W. A. Craig, Inc. (WAC), 1997. *Excavation and Sampling Report, Pacific Electric Motor Co., 1009 66th Avenue, Oakland, California.* May 12. (Partial)

Table 1. Monitoring Well Completion Details
Quarterly Monitoring Report
Fourth Quarter 2000
Pacific Electric Motor Company
1009 66th Avenue, Oakland, California

Well Number	Date Installed	Installed By	TOC Elevation (feet*)	Boring Diameter (inches)	Casing Diameter (inches)	Total Depth Boring (feet bgs)	Total Depth of Casing (feet bgs)	Screened Interval Depth (feet bgs)	
								Top	Bottom
MW-1	6/10/97	ENVIRON	101.04	8	2	26.5	25.5	5	25
MW-2	6/10/97	ENVIRON	100.12	8	2	25.5	25.5	5	25
MW-3	6/10/97	ENVIRON	100.23	8	2	25.5	25.5	5	25
MW-4	9/14/98	PES	100.32	8	2	25.0	25.0	15	25

Notes:

* = Referenced to site datum established by ENVIRON (1997).

bgs = Below ground surface.

Table 2. Water-Level Elevation Data
 Quarterly Monitoring Report
 Fourth Quarter 2000
 Pacific Electric Motor Company
 1009 66th Avenue, Oakland, California

Well Number	Date	Measured By	Top of Casing Elevation (feet*)	Depth to Water (feet BTOC)	Water-level Elevation (feet*)
MW-1	6/19/97	ENVIRON	100.67	5.87	94.80
	7/1/97	ENVIRON	100.67	5.88	94.79
	9/29/97	PES	100.67	6.45	94.22
	12/16/97	PES	100.67	3.42	97.25
	3/10/98	PES	100.67	3.06	97.61
	10/1/98	PES	100.67	6.36	94.31
	1/19/99	PES	100.67	5.33	95.34
	4/15/99	PES	100.67	3.23	97.44
	5/6/99	PES	100.67	4.36	96.31
	7/30/99	PES	100.67	5.49	95.18
	11/15/99	PES	100.67	6.30	94.37
	3/24/00	PES	100.67	3.47	97.20
	5/18/00	PES	100.67	4.34	96.33
	7/26/00	PES	100.67	5.28	95.39
	10/30/00	PES	100.67	5.68	94.99
11/14/00	PES	100.67	5.53	95.14	
MW-2	6/19/97	ENVIRON	99.85	5.30	94.55
	7/1/97	ENVIRON	99.85	5.37	94.48
	9/29/97	PES	99.85	6.05	93.80
	12/16/97	PES	99.85	3.81	96.04
	3/10/98	PES	99.85	2.89	96.96
	10/1/98	PES	99.85	5.83	94.02
	1/19/99	PES	99.85	5.26	94.59
	4/15/99	PES	99.85	3.19	96.66
	5/6/99	PES	99.85	3.91	95.94
	7/30/99	PES	99.85	4.79	95.06
	11/15/99	PES	99.85	5.92	93.93
	3/24/00	PES	99.85	3.55	96.30
	5/18/00	PES	99.85	4.04	95.81
	7/26/00	PES	99.85	4.85	95.00
	10/30/00	PES	99.85	5.31	94.54
11/14/00	PES	99.85	5.14	94.71	
MW-3	6/19/97	ENVIRON	99.93	5.50	94.43
	7/1/97	ENVIRON	99.93	5.52	94.41
	9/29/97	PES	99.93	6.16	93.77
	12/16/97	PES	99.93	5.52	94.41
	3/10/98	PES	99.93	3.11	96.82
	10/1/98	PES	99.93	5.96	93.97
	1/19/99	PES	99.93	5.45	94.48
	4/15/99	PES	99.93	3.85	96.08
	5/6/99	PES	99.93	4.12	95.81
	7/30/99	PES	99.93	5.14	94.79
	11/15/99	PES	99.93	6.35	93.58
	3/24/00	PES	99.93	3.29	96.64

**Table 2. Water-Level Elevation Data
 Quarterly Monitoring Report
 Fourth Quarter 2000
 Pacific Electric Motor Company
 1009 66th Avenue, Oakland, California**

Well Number	Date	Measured By	Top of Casing Elevation (feet[*])	Depth to Water (feet BTOC)	Water-Level Elevation (feet[*])
MW-3 Cont.	5/18/00	PES	99.93	4.16	95.77
	7/26/00	PES	99.93	5.14	94.79
	10/30/00	PES	99.93	5.43	94.50
	11/14/00	PES	99.93	5.25	94.68
MW-4	10/1/98	PES	100.32	6.32	94.00
	1/19/99	PES	100.32	5.59	94.73
	4/15/99	PES	100.32	7.71 #	92.61 #
	5/6/99	PES	100.32	4.50	95.82
	7/30/99	PES	100.32	5.18	95.14
	11/15/99	PES	100.32	6.27	94.05
	3/24/00	PES	100.32	3.59	96.73
	5/18/00	PES	100.32	4.40	95.92
	7/26/00	PES	100.32	5.65	94.67
	10/30/00	PES	100.32	5.89	94.43
	11/14/00	PES	100.32	5.61	94.71

Notes:

* = Referenced to site datum established by ENVIRON (1997).

BTOC = Below top of casing.

= Anomalous data, not used for water-level elevation contouring.

Table 3. Analytical Results for Groundwater Samples
 Quarterly Monitoring Report
 Fourth Quarter 2000
 Pacific Electric Motor Company
 1009 66th Avenue, Oakland, California

Sample Location	Date Sampled	Sampled By	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE EPA 8020 (µg/L)	MTBE EPA 8260 (µg/L)
MW-1	6/19/97	ENVIRON	18,000	3,300	200	1,100	4,900	<250	--
	9/29/97	PES	29,000	4,800	<25	2,000	3,500	<250	--
	12/16/97	PES	<50	1.3	<0.5	0.6	0.7	<5	--
	3/10/98	PES	190	2.0	<0.5	5.7	1.7	<5	--
	1/19/99	PES	1,000	40	<0.5	18	68	8.3	6.9
	4/15/99	PES	<50	0.92	0.9	0.7	0.87	<5.0	--
	7/30/99	PES	1,400	60	<0.5	63	120	13	<5.0
	11/15/99	PES	3,600	120	<0.5	150	620	<5.0	--
	3/24/00	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	5/18/00	PES	1,300	10	1.2	38	130	8.6	<5.0
	7/26/00	PES	6,400	100	7.4	260	680	<5.0	NA
10/30/00	PES	6,000	130	14	330	950	<100	NA	
MW-2	6/19/97	ENVIRON	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	9/29/97	PES	<50	<0.5	<0.5	<0.5	<0.5	<5	--
	12/16/97	PES	<50	<0.5	<0.5	<0.5	<0.5	<5	--
	3/10/98	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	1/19/99	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0
	4/15/99	PES	<50	0.75	0.64	<0.5	0.74	<5.0	--
	7/30/99	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	11/15/99	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	3/24/00	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	5/18/00	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	7/26/00	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
10/30/00	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	
MW-3	6/19/97	ENVIRON	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	9/29/97	PES	<50	<0.5	<0.5	<0.5	<0.5	<5	--
	12/16/97	PES	<50	<0.5	<0.5	<0.5	<0.5	<5	--
	3/10/98	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	1/19/99	PES	<50	0.78	<0.5	<0.5	<0.5	8.7	<5.0
	4/15/99	PES	<50	5.4	3.9	1.7	5.6	23	25
	7/30/99	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	11/15/99	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	3/24/00	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	5/18/00	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
	7/26/00	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
10/30/00	PES	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	

**Table 3. Analytical Results for Groundwater Samples
Quarterly Monitoring Report
Fourth Quarter 2000
Pacific Electric Motor Company
1009 66th Avenue, Oakland, California**

Sample Location	Date Sampled	Sampled By	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	MTBE	MTBE
								EPA 8020 (µg/L)	EPA 8260 (µg/L)
MW-4	9/15/98	PES	170,000	26,000	32,000	2,900	18,000	26,000	—
	1/19/99	PES	2,600	1,700	3.8	25	29	13,000	16,000
	4/15/99	PES	210,000	28,000	15,000	3,700	19,000	52,000	67,000
	7/30/99	PES	91,000	16,000	7,500	2,300	8,500	68,000	67,000
	11/15/99	PES	63,000	8,500	2,400	1,400	4,000	57,000	58,000
	3/24/00	PES	95,000	16,000	13,000	2,500	12,000	44,000	NA
	5/18/00	PES	91,000	15,000	10,000	2,200	9,600	64,000	77,000
	7/26/00	PES	130,000	11,000	6,400	1,700	6,500	80,000	NA
	10/30/00	PES	59,000	6,700	2,200	750	3,100	68,000	68,000*

Notes:

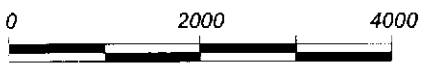
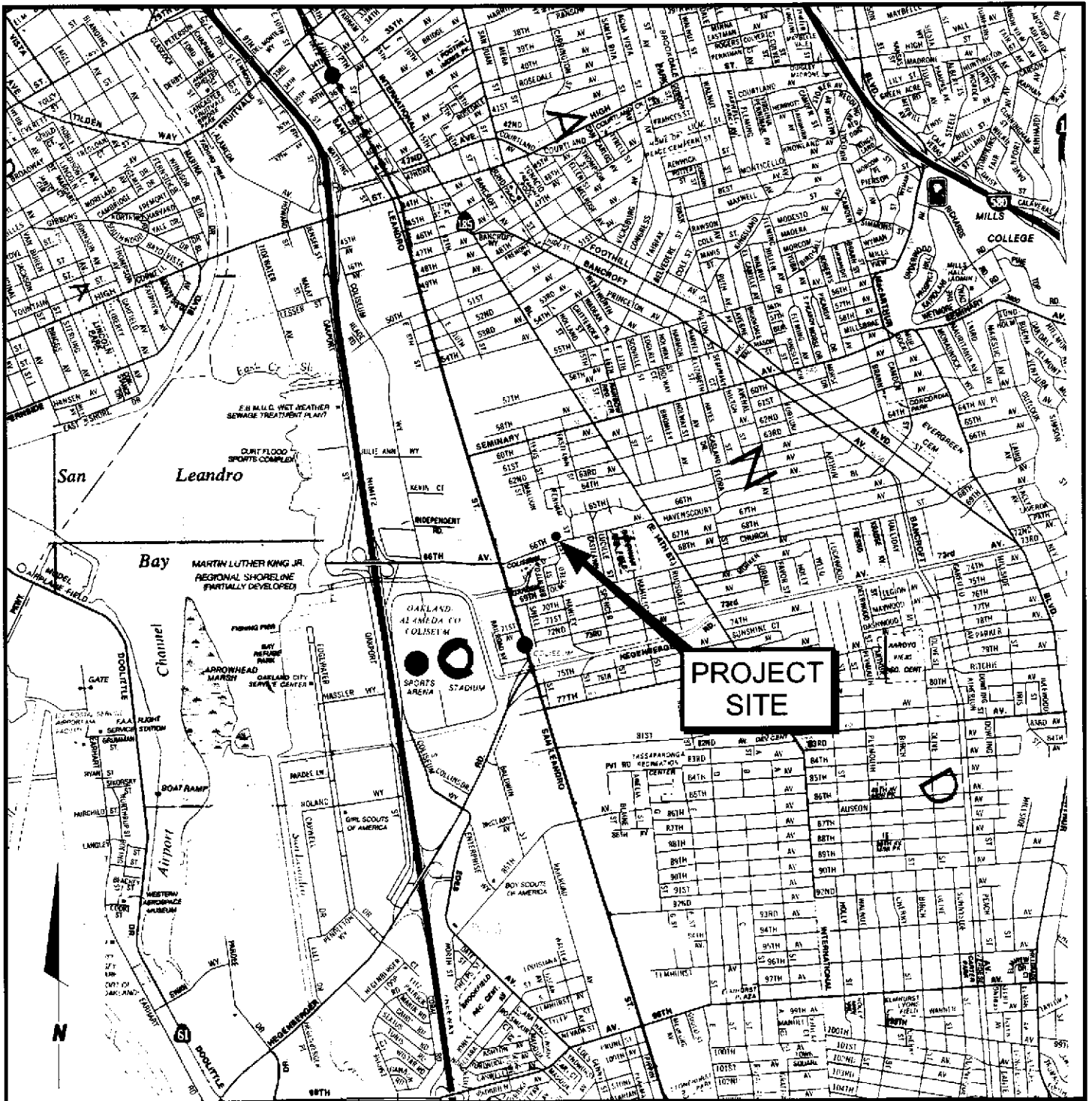
TPH-g = Total petroleum hydrocarbons quantified as gasoline (EPA 8015M).

MTBE = Methyl tert-butyl ether (EPA 8020; detected concentrations were confirmed by EPA 8260.)

µg/L = Micrograms per liter.

<50 = Not detected at or above the indicated laboratory reporting limit.

* = MTBE result confirmed but not requantified by EPA Method 8260.



Scale in Feet

Oakland Map, California State Automobile Association, 1997.



PES Environmental, Inc.
Engineering & Environmental Services

Site Location Map
Fourth Quarter 2000 Groundwater
Monitoring Report
Pacific Electric Motor Company
1009 66th Avenue, Oakland, California

PLATE
1

618.00102.002
JOB NUMBER

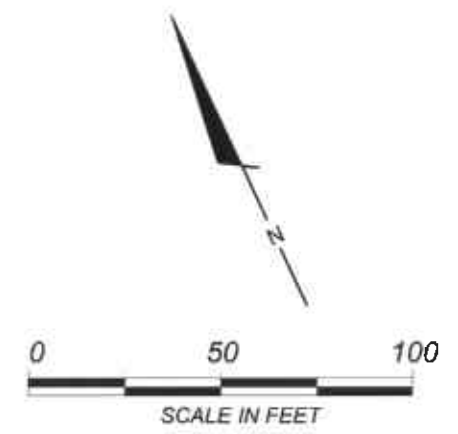
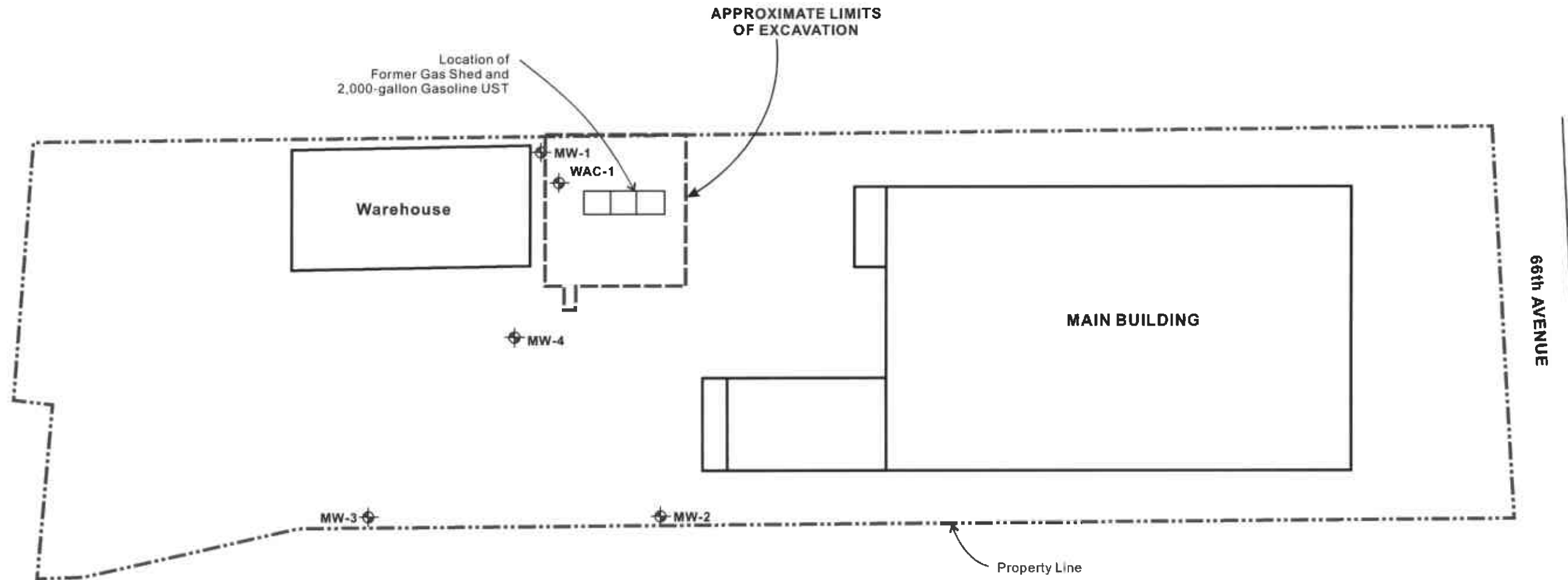
61800101004 V1.CDR
DRAWING NUMBER

WLM
REVIEWED BY

1/01
DATE



Explanation

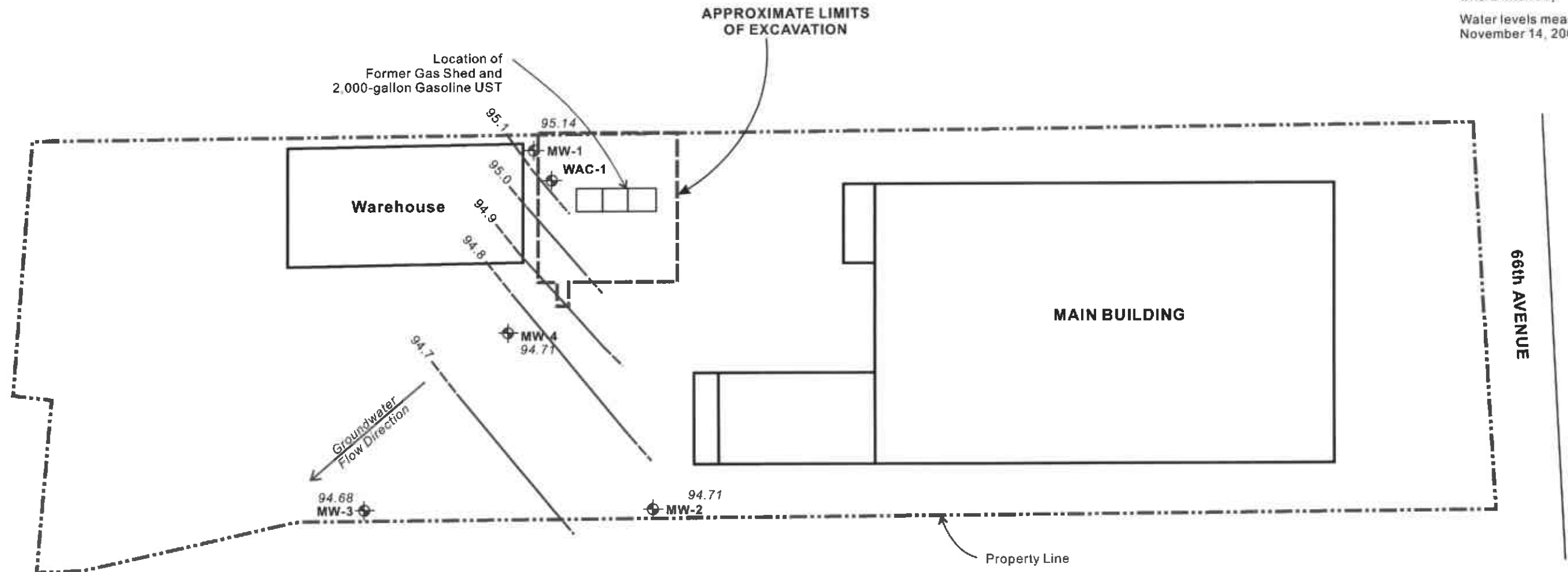
⊕ Monitoring Well Location



Drawing modified from ENVIRON, 1997

Explanation

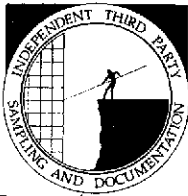
-  Monitoring Well Location
- 95.14 Water-Level Elevation (in feet, referenced to site datum.)
-  Groundwater contour (in feet referenced to site datum; dashed where inferred)
- Water levels measured on November 14, 2000.



APPENDIX A

GROUNDWATER SAMPLING REPORT

BLAINE
TECH SERVICES INC.



1680 ROGERS AVENUE
SAN JOSE, CA 95112-1105
(408) 573-7771 FAX
(408) 573-0555 PHONE
CONTRACTOR'S LICENSE #746684
www.blainetech.com

RECEIVED NOV 10 2000

November 8, 2000

PES Environmental, Inc.
1682 Novato Blvd., Suite 100
Novato, CA 94947

ATTN: Saul Germanis

Site:
Pacific Electric Motor Company
1099 66th Ave.
Oakland, California

Date:
October 30, 2000

GROUNDWATER SAMPLING REPORT 001030-X-1

Blaine Tech Services, Inc. performs specialized environmental sampling and documentation as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. does not participate in the interpretation of analytical results, or become involved with the marketing or installation of remedial systems.

This report deals with the groundwater well sampling performed by our firm in response to your request. Data collected in the course of our work at the site are presented in the TABLE OF WELL MONITORING DATA. This information was collected during our inspection, well evacuation and sample collection. Measurements include the total depth of the well and the depth to water. Water surfaces were further inspected for the presence of immiscibles. A series of electrical conductivity, pH, turbidity, and temperature readings were obtained during well evacuation and at the time of sample collection.

STANDARD PRACTICES

Evacuation and Sampling Equipment

As shown in the TABLE OF WELL MONITORING DATA, the wells at this site were evacuated according to a protocol requirement for the removal of three case volumes of water, before sampling. The wells were evacuated using disposable bailers.

Samples were collected using disposable bailers.

Bailers: A bailer, in its simplest form, is a hollow tube which has been fitted with a check valve at the lower end. The device can be lowered into a well by means of a cord. When the bailer enters the water, the check valve opens and liquid flows into the interior of the bailer. The bottom check valve prevents water from escaping when the bailer is drawn up and out of the well.

Two types of bailers are used in groundwater wells at sites where fuel hydrocarbons are of concern. The first type of bailer is made of a clear material such as acrylic plastic and is used to obtain a sample of the surface and the near surface liquids, in order to detect the presence of visible or measurable fuel hydrocarbon floating on the surface. The second type of bailer is made of Teflon or stainless steel, and is used as an evacuation and/or sampling device.

Bailers are inexpensive and relatively easy to clean. Because they are manually operated, variations in operator technique may have a greater influence than would be found with more automated sampling equipment. Also, where fuel hydrocarbons are involved, the bailer may include near surface contaminants that are not representative of water deeper in the well.

Decontamination

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site.

Effluent Materials

The evacuation process creates a volume of effluent water which must be contained. Blaine Tech Services, Inc. will place this water in appropriate containers of the client's choice or bring new 55 gallon DOT 17 E drums to the site, which are appropriate for the containment of the effluent materials. The determination of how to properly dispose of the effluent water must usually await the results of laboratory analyses of the sample collected from the groundwater well. If that sample does not establish whether or not the effluent water is contaminated, or if

effluent from more than one source has been combined in the same container, it may be necessary to conduct additional analyses on the effluent material.

Sampling Methodology

Samples were obtained by standardized sampling procedures that follow an evacuation and sample collection protocol. The sampling methodology conforms to both State and Regional Water Quality Control Board standards and specifically adheres to EPA requirements for apparatus, sample containers and sample handling as specified in publication SW 846 and T.E.G.D. which is published separately.

Sample Containers

Sample containers are supplied by the laboratory performing the analyses.

Sample Handling Procedures

Following collection, samples are promptly placed in an ice chest containing ice or an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

Sample Designations

All sample containers are identified with both a sampling event number and a discrete sample identification number. Please note that the sampling event number is the number that appears on our chain of custody. It is roughly equivalent to a job number, but applies only to work done on a particular day of the year rather than spanning several days, as jobs and projects often do.

Chain of Custody

Samples are continuously maintained in an appropriate cooled container while in our custody and until delivered to the laboratory under our standard chain of custody. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time, date and signature of person accepting custody of the samples).

Hazardous Materials Testing Laboratory

The samples obtained at this site were analyzed at Chromolab in Pleasanton, California. Chromolab is certified by the California Department of Health Services under the Environmental

Laboratory Accreditation Program (ELAP), and is listed as ELAP #1094.

Personnel

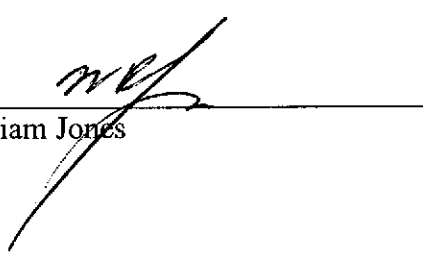
All Blaine Tech Services, Inc. personnel receive 29 CFR 1910.120(e)(2) training as soon after being hired as is practical. In addition, many of our personnel have additional certifications that include specialized training in level B supplied air apparatus and the supervision of employees working on hazardous materials sites. Employees are not sent to a site unless we are confident they can adhere to any site safety provisions in force at the site and unless we know that they can follow the written provisions of an SSP and the verbal directions of an SSO.

In general, employees sent to a site to perform groundwater well sampling will assume an OSHA level D (wet) environment exists unless otherwise informed. The use of gloves and double glove protocols protects both our employees and the integrity of the samples being collected. Additional protective gear and procedures for higher OSHA levels of protection are available.

Reportage

Submission to the Regional Water Quality Control Board and the local implementing agency should include copies of the sampling report, the chain of custody and the certified analytical report issued by the Hazardous Materials Testing Laboratory.

Please call if we can be of any further assistance.



William Jones

WRJ/cm

attachments: table of well monitoring data
chain of custody

TABLE OF WELL MONITORING DATA

Well I.D.	MW-1			MW-2			MW-3			MW-4		
Date Sampled	10/30/00			10/30/00			10/30/00			10/30/00		
Well Diameter (in.)	2			2			2			2		
Total Well Depth (ft.)	24.65			24.58			24.63			24.23		
Depth To Water (ft.)	5.68			5.31			5.43			5.89		
Free Product (in.)	NONE			NONE			NONE			NONE		
Reason If Not Sampled	--			--			--			--		
1 Case Volume (gal.)	3.0			3.0			3.0			2.9		
Did Well Dewater?	NO			NO			NO			NO		
Gallons Actually Evacuated	9.5			9.5			9.5			9.0		
Purging Device	DISPOSABLE BAILER			DISPOSABLE BAILER			DISPOSABLE BAILER			DISPOSABLE BAILER		
Sampling Device	DISPOSABLE BAILER			DISPOSABLE BAILER			DISPOSABLE BAILER			DISPOSABLE BAILER		
Time	11:18	11:22	11:27	9:03	9:09	9:15	9:55	9:59	10:06	10:35	10:39	10:43
Temperature (Fahrenheit)	65.8	65.8	64.8	64.7	65.0	63.7	63.7	64.7	64.5	66.7	68.0	67.6
pH	6.89	6.74	6.76	6.87	6.82	6.90	6.76	6.74	6.72	6.49	6.51	6.47
Conductivity (micromhos/cm)	553	549	586	1141	1118	1088	3198	4252	4276	5462	6593	6586
Nephelometric Turbidity Units	42.4	148.2	>200	>200	>200	>200	>200	>200	>200	78.9	62.4	>200
BTS Chain of Custody	001030-X1			001030-X1			001030-X1			001030-X1		
BTS Sample I.D.	MW-1			MW-2			MW-3			MW-4		
DOHS HMTL Laboratory	CHROMOLAB			CHROMOLAB			CHROMOLAB			CHROMOLAB		
Analysis	TPH-G, BTEX, MTBE			TPH-G, BTEX, MTBE			TPH-G, BTEX, MTBE			TPH-G, BTEX, MTBE		

BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE
 SAN JOSE, CALIFORNIA 95112-1105
 FAX (408) 573-7771
 PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT

LAB

Chromalab

DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

- EPA
 LIA
 OTHER

RWQCB REGION

SPECIAL INSTRUCTIONS

Invoice and Report to : PES

Attn: Saul Germanis

* Confirm MTBE hits by EPA 8240/8260

CHAIN OF
 BTS # 001030-X1

CLIENT PES

SITE Pacific Electric Motor

1099 66th Avenue

Oakland, CA

MATRIX CONTAINERS

S=SOIL W=H₂O

TOTAL

VOA VIALS

C = COMPOSITE ALL CONTAINERS

TPH - Gas (8015)

BTEX (8020)

MTBE (8020) *

SAMPLE I.D.	DATE	TIME	MATRIX	TOTAL	CONTAINERS	TPH - Gas (8015)	BTEX (8020)	MTBE (8020) *	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE
MW-1	10/30/00	1131	W	6	VOA VIALS	X	X	X	Confirm Highest MTBE Hits by 8260			260
MW-2		0921				X	X	X	all			
MW-3		1010				X	X	X				
MW-4		1047				X	X	X				

SAMPLING COMPLETED 10/30/00 1200

SAMPLING PERFORMED BY HOYT RYALES

RESULTS NEEDED NO LATER THAN Per Client

RELEASED BY [Signature] DATE 10/30/00 TIME 1740

RECEIVED BY [Signature]

DATE 10/31/00 TIME 1740

RELEASED BY DATE TIME

RECEIVED BY DATE TIME

DATE TIME

SHIPPED VIA DATE SENT TIME SENT COOLER #

WELL MONITORING DATA SHEET

Project #: <u>001030-X1</u>	Client: <u>PES</u>
Sampler: <u>HOYT</u>	Start Date: <u>10/30/00</u>
Well I.D.: <u>MW-1</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth: <u>29.65</u>	Depth to Water:
Before: After:	<u>Before:</u> <u>5.68</u> <u>After:</u> <u>7.52</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

- | | |
|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Middleburg <input type="checkbox"/> Electric Submersible | <ul style="list-style-type: none"> <input type="checkbox"/> Waterra <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump <input type="checkbox"/> Other _____ |
|--|--|

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

<u>3.0</u>	(Gals.) X	<u>3</u>	=	<u>9.1</u>	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
<u>11:18</u>	<u>65.8</u>	<u>6.89</u>	<u>553</u>	<u>42.4</u>	<u>3</u>	<u>odor/sheen</u>
<u>11:22</u>	<u>65.8</u>	<u>6.74</u>	<u>549</u>	<u>148.2</u>	<u>4</u>	
<u>11:27</u>	<u>64.8</u>	<u>6.76</u>	<u>584</u>	<u>7200</u>	<u>9.5</u>	

Did well dewater? Yes No Gallons actually evacuated: 9.5

Sampling Time: 1131 Sampling Date: 10/30/00

Sample I.D.: MW-1 Laboratory: CHROMA LAB

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Equipment Blank I.D.: @ Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: <u>001030-X1</u>	Client: <u>PES</u>
Sampler: <u>HOYT</u>	Start Date: <u>10/30/00</u>
Well I.D.: <u>MW-2</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>24.58</u>	Depth to Water: <u>5.31</u>
Before: _____ After: _____	Before: <u>(5.31)</u> After: <u>(7.45)</u>
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

- Bailer
 Disposable Bailer
 Middleburg
 Electric Submersible
 Waterra
 Peristaltic
 Extraction Pump
 Other _____

Sampling Method:

- Bailer
 Disposable Bailer
 Extraction Port
 Dedicated Tubing
 Other: _____

$$3.0 \text{ (Gals.)} \times 3 = 9 \text{ Gals.}$$
 1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
0903	64.7	6.87	1141	7200	3	
0909	65.0	6.82	1118	7200	6	
0915	63.7	6.90	1088	7200	9.5	

Did well dewater? Yes No Gallons actually evacuated: 9.5

Sampling Time: 0921 Sampling Date: 10/30/00

Sample I.D.: MW-2 Laboratory: CHROMA LAB

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other: _____

Equipment Blank I.D.: _____ @ _____ Time Duplicate I.D.: _____

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: <u>061030-X1</u>	Client: <u>PES</u>
Sampler: <u>HOYT</u>	Start Date: <u>10/30/00</u>
Well I.D.: <u>MW-3</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>24.63</u>	Depth to Water:
Before: After:	<u>Before: 5.43</u> <u>After: 7.23</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>BVC</u> Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

- Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible

- Waterra
- Peristaltic
- Extraction Pump
- Other: _____

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

<u>3.0</u>	(Gals.) X	<u>3</u>	=	<u>9</u>	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
0955	63.7	6.76	3198	7200	3	
0959	64.7	6.74	4252	7200	6	
1006	64.5	6.72	4276	7200	9.5	

Did well dewater? Yes No Gallons actually evacuated: 9.5

Sampling Time: 1010 Sampling Date: 10/30/00

Sample I.D.: MW-3 Laboratory: CHROMA LAB

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Equipment Blank I.D.: @ Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 001030-X1	Client: PES
Sampler: HOYT	Start Date: 10/30/00
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8
Total Well Depth: 24.23	Depth to Water:
Before: After:	(Before: 5.89) (After: 7.77)
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

- Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other _____

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

2.9	(Gals.) X	3	=	8.8	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1035	66.7	6.49	6462	78.9	3	odor
1039	68.0	6.51	6593	62.4	6	↓
1643	67.6	6.47	6586	8200	9	↓

Did well dewater? Yes **(No)** Gallons actually evacuated: **9**

Sampling Time: **1047** Sampling Date: **10/30/00**

Sample I.D.: **MW-4** Laboratory: **CHROMA LAB**

Analyzed for: **(TPH-G BTEX MTBE)** TPH-D Other:

Equipment Blank I.D.: @ Time Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

APPENDIX B

**LABORATORY REPORTS
AND
CHAIN-OF-CUSTODY RECORDS**

RECEIVED NOV 14 2000

PES
1682 Novato Blvd., Suite 10
Novato, CA 94947-7021

Attn.: Mr. Saul Germanas

Project: Pacific Electric Motor

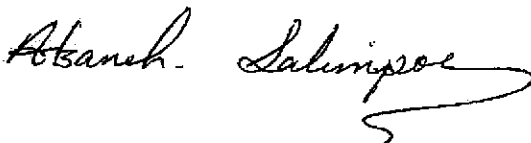
Dear Sal,

Attached is our report for your samples received on Tuesday October 31, 2000
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

The report contains a Case Narrative detailing sample receipt and analysis.

Please note that any unused portion of the samples will be discarded after December 15, 2000
unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: asalimpour@chromalab.com

Sincerely,



Afsaneh Salimpour

To: PES
Attn.: Saul Germanas

CASE NARRATIVE

General and Sample Comments

We (ChromaLab, Inc.) received 4 Water samples, on Oct 31 2000 7:33PM.

Gas/BTEX and MTBE

MTBE hits was confirmed by GCMS Method 8260.

Gas/BTEX and MTBE

PES	✉ 1682 Novato Blvd., Suite 10 Novato, CA 94947-7021
Attn: Saul Germanas	Phone: (415) 899-1600 Fax: (415) 899-1601
Project #:	Project: Pacific Electric Motor

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	10/30/2000 11:31	1
MW-2	Water	10/30/2000 09:21	2
MW-3	Water	10/30/2000 10:10	3
MW-4	Water	10/30/2000 10:47	4

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-11-0008

To: PES

Test Method: 8020
8015M

Attn.: Saul Germanas

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID: MW-1	Lab Sample ID: 2000-11-0008-001
Project: Pacific Electric Motor	Received: 10/31/2000 19:33
Sampled: 10/30/2000 11:31	Extracted: 11/08/2000 06:58
Matrix: Water	QC-Batch: 2000/11/08-01.02

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	6000	1000	ug/L	20.00	11/08/2000 06:58	
Benzene	130	10	ug/L	20.00	11/08/2000 06:58	
Toluene	14	10	ug/L	20.00	11/08/2000 06:58	
Ethyl benzene	330	10	ug/L	20.00	11/08/2000 06:58	
Xylene(s)	950	10	ug/L	20.00	11/08/2000 06:58	
MTBE	ND	100	ug/L	20.00	11/08/2000 06:58	
Surrogate(s)						
Trifluorotoluene	105.2	58-124	%	1.00	11/08/2000 06:58	
4-Bromofluorobenzene-FID	91.9	50-150	%	1.00	11/08/2000 06:58	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-11-0008

To: PES

Test Method: 8020
8015M

Attn.: Saul Germanas

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID: MW-2	Lab Sample ID: 2000-11-0008-002
Project: Pacific Electric Motor	Received: 10/31/2000 19:33
Sampled: 10/30/2000 09:21	Extracted: 11/08/2000 07:34
Matrix: Water	QC-Batch: 2000/11/08-01.02

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	11/08/2000 07:34	
Benzene	ND	0.50	ug/L	1.00	11/08/2000 07:34	
Toluene	ND	0.50	ug/L	1.00	11/08/2000 07:34	
Ethyl benzene	ND	0.50	ug/L	1.00	11/08/2000 07:34	
Xylene(s)	ND	0.50	ug/L	1.00	11/08/2000 07:34	
MTBE	ND	5.0	ug/L	1.00	11/08/2000 07:34	
Surrogate(s)						
Trifluorotoluene	97.1	58-124	%	1.00	11/08/2000 07:34	
4-Bromofluorobenzene-FID	87.4	50-150	%	1.00	11/08/2000 07:34	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

Printed on: 11/10/2000 08:07

Page 3 of 8

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-11-0008

To: PES

Test Method: 8020
8015M

Attn.: Saul Germanas

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID: MW-3	Lab Sample ID: 2000-11-0008-003
Project: Pacific Electric Motor	Received: 10/31/2000 19:33
Sampled: 10/30/2000 10:10	Extracted: 11/08/2000 08:09
Matrix: Water	QC-Batch: 2000/11/08-01.02

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	11/08/2000 08:09	
Benzene	ND	0.50	ug/L	1.00	11/08/2000 08:09	
Toluene	ND	0.50	ug/L	1.00	11/08/2000 08:09	
Ethyl benzene	ND	0.50	ug/L	1.00	11/08/2000 08:09	
Xylene(s)	ND	0.50	ug/L	1.00	11/08/2000 08:09	
MTBE	ND	5.0	ug/L	1.00	11/08/2000 08:09	
Surrogate(s)						
Trifluorotoluene	104.0	58-124	%	1.00	11/08/2000 08:09	
4-Bromofluorobenzene-FID	95.1	50-150	%	1.00	11/08/2000 08:09	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-11-0008

To: PES

Test Method: 8020
8015M

Attn.: Saul Germanas

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID: MW-4	Lab Sample ID: 2000-11-0008-004
Project: Pacific Electric Motor	Received: 10/31/2000 19:33
Sampled: 10/30/2000 10:47	Extracted: 11/08/2000 12:11
Matrix: Water	QC-Batch: 2000/11/08-01.02

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	59000	25000	ug/L	500.00	11/08/2000 12:11	
Benzene	6700	250	ug/L	500.00	11/08/2000 12:11	
Toluene	2200	250	ug/L	500.00	11/08/2000 12:11	
Ethyl benzene	750	250	ug/L	500.00	11/08/2000 12:11	
Xylene(s)	3100	250	ug/L	500.00	11/08/2000 12:11	
MTBE	68000	2500	ug/L	500.00	11/08/2000 12:11	
Surrogate(s)						
Trifluorotoluene	105.5	58-124	%	1.00	11/08/2000 12:11	
4-Bromofluorobenzene-FID	88.9	50-150	%	1.00	11/08/2000 12:11	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-11-0008

To: PES

Test Method: 8015M

8020

Attn.: Saul Germanas

Prep Method: 5030

Batch QC Report Gas/BTEX and MTBE

Method Blank	Water	QC Batch # 2000/11/08-01.02
MB: 2000/11/08-01.02-001		Date Extracted: 11/08/2000 03:37

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	11/08/2000 03:37	
Benzene	ND	0.5	ug/L	11/08/2000 03:37	
Toluene	ND	0.5	ug/L	11/08/2000 03:37	
Ethyl benzene	ND	0.5	ug/L	11/08/2000 03:37	
Xylene(s)	ND	0.5	ug/L	11/08/2000 03:37	
MTBE	ND	5.0	ug/L	11/08/2000 03:37	
Surrogate(s)					
Trifluorotoluene	101.6	58-124	%	11/08/2000 03:37	
4-Bromofluorobenzene-FID	95.0	50-150	%	11/08/2000 03:37	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

Printed on: 11/10/2000 08:07

Page 6 of 8

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-11-0008

To: PES

Test Method: 8015M
8020

Attn: Saul Germanas

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2000/11/08-01.02

LCS: 2000/11/08-01.02-002

Extracted: 11/08/2000 04:13

Analyzed 11/08/2000 04:13

LCSD: 2000/11/08-01.02-003

Extracted: 11/08/2000 04:48

Analyzed 11/08/2000 04:48

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Gasoline	512	481	500	500	102.4	96.2	6.2	75-125	20		
Benzene	109	110	100.0	100.0	109.0	110.0	0.9	77-123	20		
Toluene	105	107	100.0	100.0	105.0	107.0	1.9	78-122	20		
Ethyl benzene	95.3	96.6	100.0	100.0	95.3	96.6	1.4	70-130	20		
Xylene(s)	276	280	300	300	92.0	93.3	1.4	75-125	20		
Surrogate(s)											
Trifluorotoluene	470	469	500	500	94.0	93.8		58-124			
4-Bromofluorobenzene-F1	465	439	500	500	93.0	87.8		50-150			

1220 Quarry Lane * Pleasanton, CA 94566-4756

Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

To: PES

Test Method: 8015M
8020

Attn: Saul Germanas

Prep Method: 5030

Legend & Notes

Gas/BTEX and MTBE

Notes

MTBE hits was confirmed by GCMS Method 8260.

BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE
 SAN JOSE, CALIFORNIA 95112-1105
 FAX (408) 573-7771
 PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT

LAB

Chromalab

DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

- EPA
- LIA
- OTHER

RWQCB REGION _____

200-11-0008

55524

CHAIN OF	BTS # 001030-X1
CLIENT	PES
SITE	Pacific Electric Motor
	1099 66th Avenue
	Oakland, CA

C = COMPOSITE ALL CONTAINERS

SAMPLE I.D.	DATE	TIME	MATRIX		CONTAINERS		TPH - Gas (8015)	BTEX (8020)	MTBE (8020) *	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE
			S=SOIL W=H ₂ O	W	TOTAL	W							
MW-1	10/30/00	1131	W	W	6	6	X	X	X	Confirm highest MTBE hits by EPA 8240/8260			
MW-2		0921					X	X	X	all			
MW-3		1010					X	X	X				
MW-4		1047					X	X	X				
													3.5°C

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED
	10/30/00	1200	HOYT RYALES	NO LATER THAN Per Client

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>[Signature]</i>	10/30/00	1740	<i>[Signature]</i>	10/31/00	1740
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>[Signature]</i>	10/31/00	1933	Denise Harrington	10/31/00	1933

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #

DISTRIBUTION

**FOURTH QUARTER 2000
GROUNDWATER MONITORING REPORT
PACIFIC ELECTRIC MOTOR COMPANY
1009 66TH AVENUE
OAKLAND, CALIFORNIA**

JANUARY 31, 2001

COPY NO. 5

		<u>Copy No.</u>
1 Copy	Pacific Electric Motor Company 137 Fiesta Circle Orinda, California 94563 Attention: Mr. Steve Boyd	1
2 Copies	Pacific Electric Motor Company 129 Natalie Drive Moraga, California 94556-2422 Attention: Mr. Rand Perry	2 - 3
2 Copies	Alameda County Health Care Service Agency Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577 Attention: Mr. Barney Chan	4 - 5
3 Copies	PES Job File	6 - 8
1 Copy	Unbound Original	9